CLAIMS

1. A non-human transgenic mammal which comprises cells containing a construct of a heat shock protein (hsp) promoter linked to the growth hormone (GH) gene sequence.

2. A non-human transgenic mammal according to claim 1, wherein the heat shock protein promoter is hsp70 gene promoter.

3. A non-human transgenic mammal according to claim 1, which is a rodent.

4. A non-human transgenic mammal according to claim 3, which is a mouse.

5. A method for the study of chemical, physical and biological toxic agents which comprises:

a) exposing the transgenic mammal of ~~claims 1-4~~ claim 1 to the toxic agent;

b) determining the effect through measurement of the hematic concentration of the reporter-gene.

6. A method according to claim 5, wherein the same animal is used for repeated tests with the same or different toxic agent.

7. A method according to ~~claims 5-6~~ claim 5, for the study of toxicity kinetics of one or more toxic agents.

8. A method according to ~~claims 5-6~~ claim 5, for the study of heat stress.

9. A method according to ~~claims 5-6~~ claim 5, for the study of metal toxicity.

AMENDED SHEET

10. A method according to claim 9 for the study of toxicity of metals selected from the group consisting of Rb, Cu, Hg, As and Cd.

11. The use of the transgenic mammal of claim 1 for in vivo toxicity studies.

12. The use of a transgenic animal according to claim 11, wherein said animal is a mouse.

GRIFFIN, BUTLER, WHISENHUNT & SZIPL, LLP
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204

Telephone: (703) 979-5700
Facsimile: (703) 979-7429
Customer No.: 113